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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MILLER, BRIAN E

ART UNIT PAPER NUMBER

2627

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/709,941

Applicant(s)

HO, CHUN-LUNG

Examiner

Brian E. Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

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Claims 1-16 are pending.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The disclosure is objected to because of the following informalities: (a) para [0006], lines 3 & 4 the term "OLE_LINK1" should be omitted, as it is not clear what this means; (b) para [0027] last line the phrase "a force to pushes" is awkward; (c) para [0028] last 3 lines the phrase "is deposed that it and" is grammatically confusing. Also the word "deposed" should be changed to "disposed" for clarity; (d) para [0030] also includes the word "deposing" and should be amended appropriately. Appropriate correction is required.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the (a) "...and combining with the turntable so as to fix an optical disk", as recited in claim 8 must be shown or the feature(s) canceled from the claim(s). There are no drawings that show this claimed combination, and no turntable is shown either. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing

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should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 4, 6-8, 10-11 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the specification. Applicant has stated “the present invention can provide a real-time preload to the clamping device 10A *with the mutually repulsive force between the third magnetic element 14d and the second magnetic element.*” (emphasis added by Examiner) and this statement indicates that the invention is different from what is defined in the claim(s) because the noted claims do not recite this “mutually repulsive force to hold the disk firmly to the turntable”. Without this critical language, there is not sufficient structure to provide the recited “pre-load”.

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*It is noted that claims 2-3, 5, 9 are not rejected under this statute since they provide sufficient structure.

6. Claims 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 9-11 all recite “the third magnetic element”, which lacks proper antecedent basis. Further, it is not clear with this recitation whether there are three or four magnetic elements.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 12, 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Camerik (US 4,768,185). Camerik discloses an optical disc apparatus, including a clamping device for use in a non-contact clamping mechanism to work with a turntable 18 for fixing a disk 7 in a disk drive, the disk drive comprising a magnetic element 35B attached to an upper cover 3, the clamping device comprising: a clamp body 34; and a first magnetic element 35A disposed in the clamp body 34 for generating a mutually repulsive force between the magnetic element and the first magnetic element to provide a real-time preload to the clamping device (see col. 6, lines 23-50); (as for claim 15) wherein the magnetic element and first magnetic elements are magnets.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (AAPA), e.g., FIGs. 1-5, in view of Camerik (US 4,768,185).

The AAPA discloses, as shown in the figures and paragraphs [0005], [0006], [0007] and [0008], (as to claims 1 & 8), a non-contact clamping mechanism for use in an optical disk drive comprising a turntable (not shown), the non-contact clamping mechanism comprising: an upper cover 5 comprising a first hole 5a; a clamping device installed above the first hole 5a of the upper cover 5 for combining with the turntable so as to fix an optical disk (not shown); an upper plate 1 for covering the first hole of the upper cover to prevent the clamping device from departing from the optical disk drive when reading the optical disk.

The AAPA is silent as to a magnetic element attached to the upper plate for providing a real-time preload to the clamping device. Camerik discloses an optical disk device, shown at least in FIGs. 1 & 6, includes a magnetic configuration which includes magnets 35B and 35A positioned on the upper portion of the clamping device, which when positioned to clamp the disc 7, provide a repulsive magnetic force to retain a solid and secure clamping structure (see col. 6, lines 23-50). From this teaching, it would have been obvious to a person skilled in this art at the time the invention was made to have provided these magnets into the apparatus of the AAPA. The motivation would have been: providing such a magnetic repulsive force in the clamping device

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would have simply and securely provided clamping for the optical disc, and do not subject the spindle to an axial load during operation, as taught by Camerik (see col. 3, lines 22-43).

The combination as set for above is considered to teach (as per claim 2) wherein the clamping device comprises a first magnetic element 35A for generating a mutually repulsive force between the magnetic element 35B and the first magnetic element 35A; (as per claim 3) wherein the AAPA further shows (FIG. 1) a clamp yoke 2, a second magnetic element 3 for combining with the clamp yoke 2; and a clamp body 4 for combining with the clamp yoke and the second magnetic element 3; and (from the combination) wherein the first magnetic element 54A is connected to the clamp body 21 (from Camerik); (as per claim 4) wherein the magnetic element is a magnet; (as per claim 5) wherein the first magnetic element 35A and the second magnetic element 3 are magnets; (as per claim 6) wherein the magnetic element 35B is in the form of a circular ring; (as per claim 7) wherein the first magnetic element 35A and the second magnetic element 3 are in the form of circular rings.

As the limitations of claim 8-11 are similar to those in claims 1-7, they are rejected under the same grounds, however, as applicant has reversed the functions for the “first magnetic element” and “second magnetic element”. So, in order to avoid confusion, it is suggestion by the Examiner to remain consistent throughout the claims. For rejection purposes, the “first magnetic element” is element 3 (in AAPA) and the “second magnetic element” is element 35A.

Claims 9-11 further have 112 indefiniteness problems, as addressed above, but are rejected under the same grounds.

Claims 12-16 are further rejected under the same grounds as including similar limitations as addressed above.

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Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Including US Patents to Van Zanten et al (4,823,337), Kim et al (6,826,772) and Clurman (4,477,894) are all cited to teach repulsive clamping configurations for discs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Miller whose telephone number is (571) 272-7578. The examiner can normally be reached on M-TH 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Brian E. Miller
Primary Examiner
Art Unit 2627

BEM
December 7, 2006